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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,401	07/26/2004	Magnus Rabe	027651-238	5362

21839 7590 07/27/2005

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EXAMINER

SELLS, JAMES D

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,401

Applicant(s)

RABE, MAGNUS

Examiner

James Sells

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Smith (GB 2,344,487).

Smith discloses an ultrasonic resonator or horn with slots extending through the resonant body. As shown in Fig. 2, the horn comprises an input face or fixing section 12, an output face or sealing section 14 and a transition section positioned there between. This transition section is provided with one or more slots 22 extending between the fixing and sealing sections in the manner claimed by the applicant.

These slots can have various shapes, sizes and configurations with first, second and third radii of curvature and rounded off portions in the manner claimed by the applicant. See Figs. 5-6, 10-12 and 25-28. Also see page 5, lines 23-28; page 6, lines 7-24; and page 8, lines 13-24.

In particular, Figs. 11, 12 and 26 show slots with oval configurations. These oval shapes inherently have regions with difference radii of curvature. This these oval slows have a first radius of curvature difference from at least one of a second and third radii of curvature in the manner of applicant's first, second and third portions 5a-c shown in Fig.

4.

Regarding claim 10, applicant is directed to Fig. 20 of Smith. This figure shows a side view of an ultrasonic horn. This horn is shown with a fixing section, sealing section and transfer section. The transfer and sealing sections are tapered or curved and have the radii of curvature as claimed by the applicant.

Regarding claim 11, applicant is directed to Fig. 2 of Smith. This figure shows a horn in which lower portions 19 of the side faces 16 are stepped inward slightly. These stepped regions define recesses with first and second portions and radii of curvature in the manner claimed by the applicant.

Response to Arguments

Applicant's arguments filed April 25, 2005 have been fully considered but they are not persuasive.

Regarding claim 1, applicant argues Smith lacks the disclosure that the rounded off or radiused end of the slot should be configured to have first, second and third portions each having a radius of curvature with the first radius of curvature being difference from the second and third radii of curvature. The examiner does not agree. As stated above, Figs. 11, 12 and 26 show slots with oval configurations. These oval shapes inherently have regions with difference radii of curvature. This these oval slows have a first radius of curvature difference from at least one of a second and third radii of curvature in the manner of applicant's first, second and third portions 5a-c shown in Fig. 4. Therefore applicant's argument is believed to be incorrect in this instance.

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Regarding claim 10, applicant argues Smith lacks the disclosure that the transfer and sealing sections have difference radii of curvature in the manner claimed by the applicant. The examiner does not agree. As stated above, Fig. 20 shows a side view of an ultrasonic horn. This horn is shown with a fixing section, sealing section and transfer section. The transfer and sealing sections are tapered or curved and have the radii of curvature as claimed by the applicant. Therefore applicant's argument is believed to be incorrect in this instance.

Regarding claim 11, applicant argues Smith lacks the disclosure the recesses with the difference radii of curvature in the manner claimed by the applicant. The examiner does not agree. Fig. 2 shows a horn in which lower portions 19 of the side faces 16 are stepped inward slightly. These stepped regions define recesses with first and second portions and radii of curvature in the manner claimed by the applicant. Therefore applicant's argument is believed to be incorrect in this instance.

Telephone/Fax

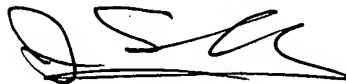
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sells whose telephone number is (571) 272-1237. The examiner can normally be reached on Monday-Friday between 9:30 AM and 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached at (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



**JAMES SELLS
PRIMARY EXAMINER
TECH. CENTER 1700**